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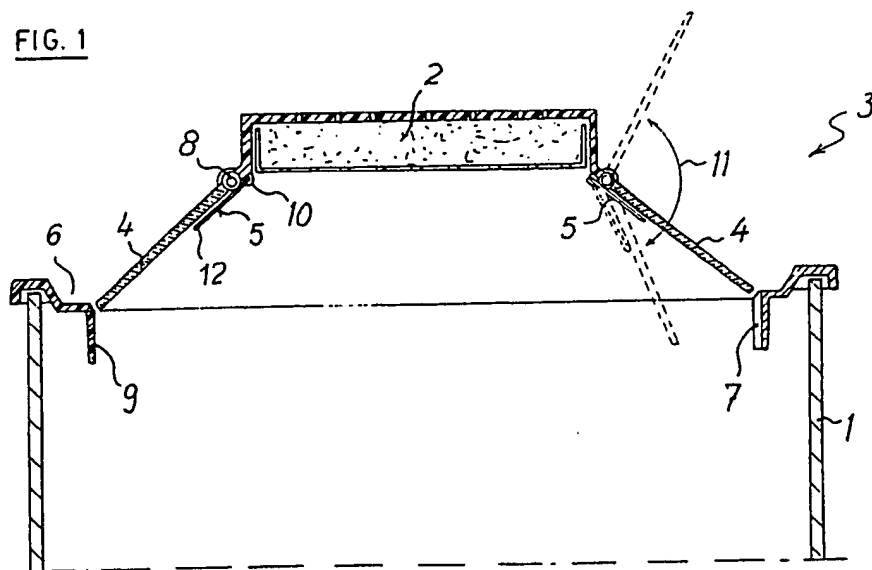
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(54) A filter lid for a fondue set and for a deep-fryer

(57) The lid (3) intended to allow food to pass into an oil bath and be removed from the cooking container (1) is suitable both for cooking fondues and chips.

Made from a high-temperature and oil resistant material it comprises an interchangeable filter cartridge (2), one or more movable flaps (4) and at least one spring returning the or each flap (4) into the plane of the wall of the lid (3) after the introduction of the food.

FIG. 1



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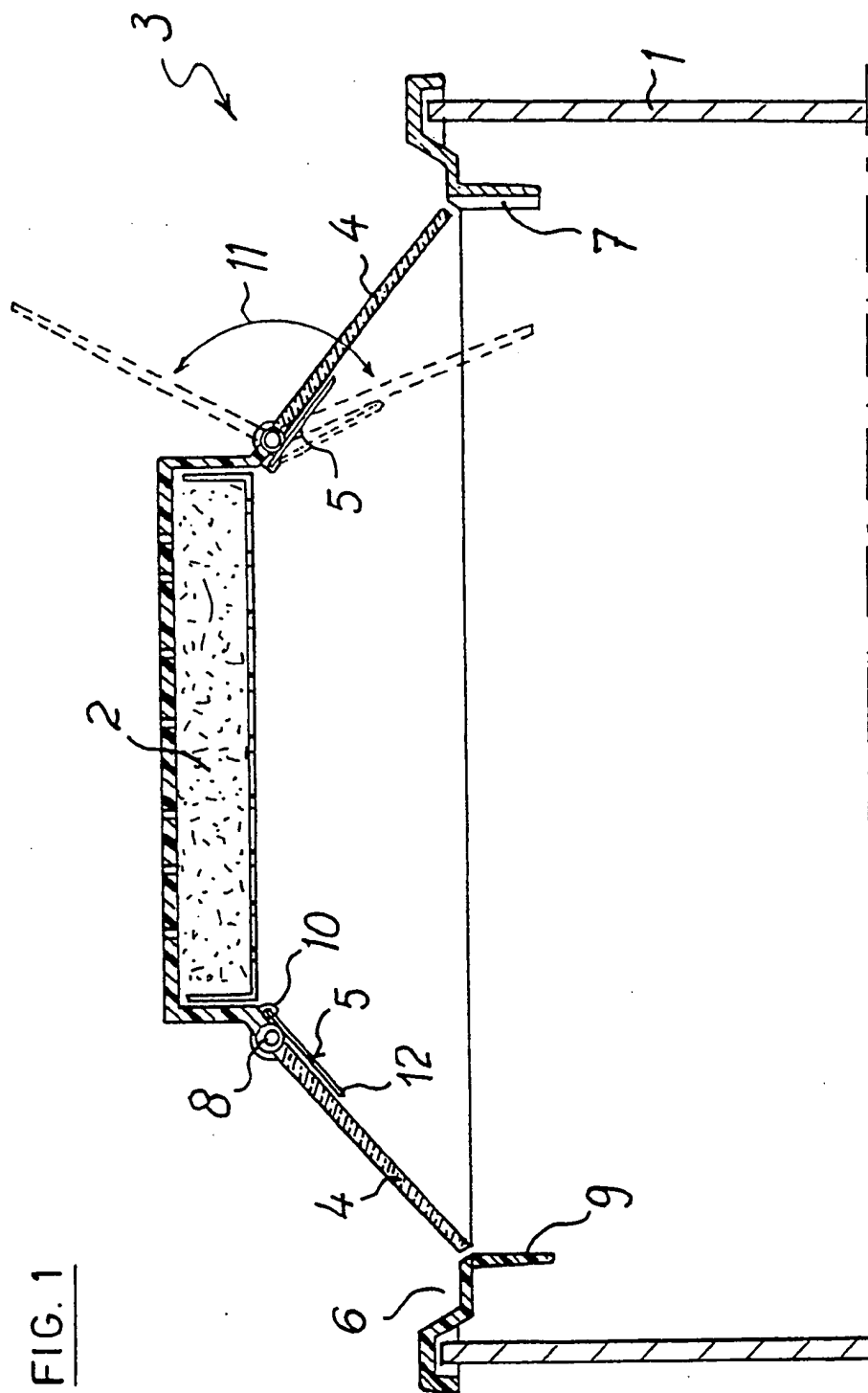
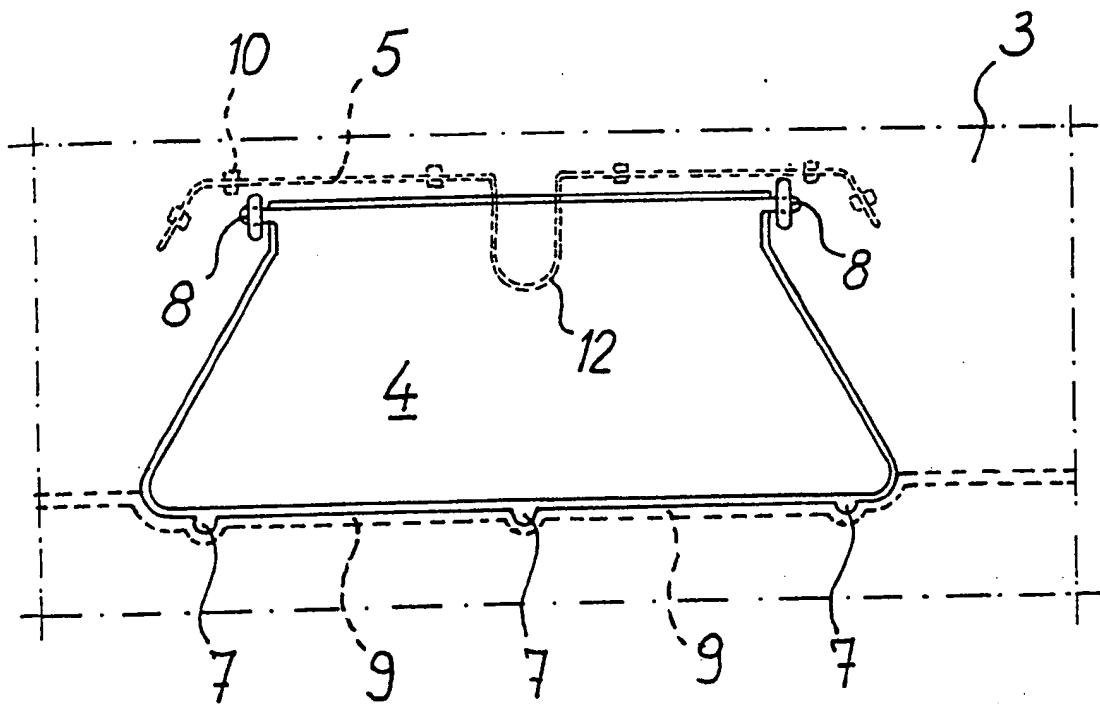


FIG. 1

FIG. 2

## SPECIFICATION

### A filter lid for a fondue set or a deep-fryer

- 5 This invention relates to a filter lid for a cooking pan of a fondue set or a deep-fryer.

According to the present invention, there is provided a filter lid for a cooking pan of a fondue set or a deep-fryer, which lid is provided with at least one opening which is normally closed by a movable flap enabling food attached to the end of a cooking implement to pass in either direction through the lid opening.

- A lid embodying the invention is intended to be fitted to a pan containing oil heated to a temperature adequate to cooking the food and is adapted to allow food to be passed into the oil and then to be extracted from the cooking container, while providing substantially complete sealing between the cooking container and the outside of the device.

To this end the filter lid is provided with the movable flaps whereby the food, e.g. pieces of meat on the end of a fork, can be introduced and withdrawn.

- 25 Apart from the times when food is being introduced or withdrawn from the cooking container, the movable flaps provide sufficient sealing to allow the oil fumes to be filtered as they are discharged through a filter cartridge fitted to the lid.

- 30 Each movable flap on the lid retracts automatically by pivoting about a pivot situated at an upper part of the flap, this movement being produced by the force exerted by the food when a user pushes the food against the outside surface of the flap. This force is compensated solely by a spring disposed beneath the fixed part of the lid and coming into contact with the bottom part of the flap. As soon as the food has been deposited in the oil and the handle of the fork has been located in a notch provided in the bottom edge of the lid for the purpose, the lid automatically returns to its initial position thus closing the opening in the filter lid.

- The movable flaps are preferably made from transparent material so that it is possible to see how well the food has been cooked without having actually to remove it from the container containing the oil fumes.

- When the food is withdrawn after cooking, the flap is automatically driven upwards, and when the food is no longer in contact with the flap the latter falls by its own weight into the closed position.

- Since the flap remains in a flush position with respect to the wall of the lid when not subject to any external stress, the equipment can also be used for cooking other foods (e.g. chips) and then acts solely as a conventional filter lid.

- In order that the invention may be readily understood, an embodiment thereof will now be described, by way of example, with reference to the accompanying drawings, in which:

60 *Figure 1* is a cross-sectional view of a lid embodying the invention fitted on a cooking container.

*Figure 2* is a plan view of a flap provided on the lid.

- In the two Figures of the drawings, like reference numerals denote like parts.

Referring to *Figure 1*, a lid 3 is made from a heat and oil resistant material and is adapted to be fitted to a pan 1 for containing heated oil.

The lid 3 comprises:

- 70 (a) An interchangeable filter cartridge 2 which can be replaced after use. This cartridge is housed in a cavity having a base which, like the filter holder, is formed with passage apertures.

- (b) One or more transparent movable flaps 4 made of a heat and oil resistant material and each adapted normally to close a respective opening in the wall of the lid.

- (c) A respective spring 5 which returns each flap into the plane of the wall of the lid 3 after food has been introduced into the pan 1 through the lid opening normally closed by the flaps.

- The lid is of frusto-pyramid shape, the filter cartridge 2 being disposed at the apex. This shape enables the oil fumes to pass to the outside through the filter element 2.

- The movable flaps 4 are disposed on the inclined surfaces of the main lid 3. The object of these flaps is to allow food to be introduced into the oil in the cooking container and to be removed therefrom, while providing substantially complete sealing between the cooking container and the outside of the device. To this end, the flaps have an axial pivot 5 at their upper parts so that they are angularly movable in either direction over a maximum angle of substantially 180°.

- Spring 5 is secured to the inner surface of lid 3 by clips 10 and comes into contact with lid 4 via a loop 12 when the lid is in the closed position.

- A channel 6 is provided over the entire periphery of the lid to collect any oil which drips from the food. This oil can then fall back into the oil bath in the pan via notches 7 provided to locate the handles of cooking implements, such as forks, during the cooking time.

- 105 In order to prevent the food from dropping back into the oil when withdrawn, a fixed wall 9 is provided beneath the bottom edge of the lid opening, this wall being formed in the axial part of the lid 3, thus preventing the food from catching here.

- 110 When a user wishes to introduce food into the cooking container, he applies pressure to the movable flap by means of a fork or the like supporting the food, and this pressure is substantially proportional to the inverse force produced by the loop 12 of the spring 5.

- When the food is deposited in the base of the pan, the arm of the fork is located in a notch 7 provided for this purpose on the fixed part of the lid 3.

- The spring 5 then repositions the flap in the axial plane of the inclined wall of the lid.

- One or more forks may be introduced simultaneously or successively through the same flap, the number being limited solely by the number of notches 7 provided along the bottom edge of the lid opening.

- 120 When the user wishes to withdraw the food after having observed the degree of cooking through the transparent flap 4, the food withdrawal movement automatically drives the flap upwards, the force required being limited solely by the weight of the

flap 4. The spring 5 is then no longer in contact with the flap so that the food cannot become detached from the fork nor drop back into the oil. Also, because of the position of the flap pivot 8 on withdrawal of the food, the flap movement is limited by the fixed wall of the lid so that the centre of gravity of the flap cannot go beyond the flap pivot, the maximum angle being shown at point 11 in Figure 1. The flap thus automatically falls back and seals the passage after the removal of any object through the lid opening.

## CLAIMS

1. A filter lid for a cooking pan of a fondue set or a deep-fryer, which lid is provided with at least one opening which is normally closed by a movable flap enabling food attached to the end of a cooking implement to pass in either direction through the lid opening.
2. A lid according to Claim 1, in the form of a frusto-pyramid and each movable flap is disposed on an inclined surface thereof.
3. A lid according to Claim 2, in which a filter cartridge is disposed at the apex of the frusto-pyramid.
4. A lid according to any one of Claims 1 to 3, comprising a respective spring for each flap, the spring being arranged to return the flap into the plane of the wall of the lid after food is passed through the flap in a sense to introduce it into the pan.
5. A lid according to Claim 4, in which each flap has an axial pivot at an upper part thereof, which pivot permits angular movement of the flaps in either direction over a maximum of substantially 180°.
6. A lid according to Claim 4 or 5, in which the spring is secured to the inner surface of the lid and comes into contact with the flap via a loop when the flap is in the closed position.
7. A lid according to any preceding claim in which a channel is provided over the entire periphery of the lid to collect any oil dripping from the food.
8. A lid according to any preceding claim, in which a fixed wall is provided beneath a bottom edge of the lid opening closed by each flap and extends downwards parallel to a vertical axis of the lid.
9. A lid according to any preceding claim, in which a bottom edge of the lid opening closed by each movable flap has at least one notch intended to receive the handle of a cooking implement, such as a fork, when food attached to the latter is immersed in the cooking pan.
10. A filter lid for a pan of a fondue set or a deep-fryer, substantially as hereinbefore described with reference to the accompanying drawings.
11. A fondue set or deep-fryer comprising a pan for containing heated oil and a lid according to any preceding claim.
12. Any novel feature or combination of features described herein.